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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
08/888,376	07/07/97	JACKSON E	7045.0002

IM22/0909

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EXAMINER	
OHORODNIK,S	
ART UNIT	**PAPER NUMBER**
1764	7

DATE MAILED: 09/09/99

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

Office Action Summary

Application No.	Applicant(s)
08/888,376	Edward Jackson
Examiner	**Group Art Unit**
Susan K. Ohorodnik	1764

☒ Responsive to communication(s) filed on *Aug 2, 1999*.

☒ This action is **FINAL**.

☐ Since this application is in condition for allowance except for formal matters, **prosecution as to the merits is closed** in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

A shortened statutory period for response to this action is set to expire *3* month(s), or thirty days, whichever is longer, from the mailing date of this communication. Failure to respond within the period for response will cause the application to become abandoned. (35 U.S.C. § 133). Extensions of time may be obtained under the provisions of 37 CFR 1.136(a).

Disposition of Claims

☒ Claim(s) *1-4* is/are pending in the application.

Of the above, claim(s) _____ is/are withdrawn from consideration.

☐ Claim(s) _____ is/are allowed.

☒ Claim(s) *1-4* is/are rejected.

☐ Claim(s) _____ is/are objected to.

☐ Claims _____ are subject to restriction or election requirement.

Application Papers

☐ See the attached Notice of Draftsperson's Patent Drawing Review, PTO-948.

☐ The drawing(s) filed on _____ is/are objected to by the Examiner.

☒ The proposed drawing correction, filed on *Aug 2, 1999* is ☒approved ☐disapproved.

☐ The specification is objected to by the Examiner.

☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. § 119

☐ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).

☐ All ☐ Some* ☐ None of the CERTIFIED copies of the priority documents have been

☐ received.

☐ received in Application No. (Series Code/Serial Number) _____.

☐ received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

*Certified copies not received: _____.

☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

Attachment(s)

☐ Notice of References Cited, PTO-892

☐ Information Disclosure Statement(s), PTO-1449, Paper No(s). _____

☐ Interview Summary, PTO-413

☐ Notice of Draftsperson's Patent Drawing Review, PTO-948

☐ Notice of Informal Patent Application, PTO-152

--- SEE OFFICE ACTION ON THE FOLLOWING PAGES ---

DETAILED ACTION

Drawings

1. The corrected or substitute drawings were received on August 2, 1999. These drawings are acceptable.

Claim Rejections - 35 USC § 112

2. As a result of the amendments received on August 2, 1999. The 35 USC 112 first paragraph rejections are withdrawn.

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claims 1-4 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

With respect to claim 1, line 14, the term "substantially all" is vague and indefinite. It is unclear what is meant by "substantially all". A suggested correction is to delete the phrase.

With respect to claim 4, line 15, the term "substantially all" is vague and indefinite. (See comments for claim 1 above.)

Double Patenting

5. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970);and, *In re Thorington,* 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

6. Claims 1-4 are provisionally rejected under the judicially created doctrine of double patenting over claims 1-3 of copending Application No. 09/131,121. This is a provisional double patenting rejection since the conflicting claims have not yet been patented.

The subject matter claimed in the instant application is fully disclosed in the referenced copending application and would be covered by any patent granted on that copending application since the referenced copending application and the instant application are claiming common subject matter, as follows:

Application '121 claims a sulfurous acid generator with significantly all the limitations recited in the instant application. The substantial differences between '121 and the instant application is that '121 does not claim an absorption tower (instant claim 3, lines 2-7) and that the application '121 recites a trapping means on the fluid discharge outlet (claim 1, line 29). It would have been obvious to one having ordinary skill in the art at the time of invention that the absorption tower of the instant claim could have been omitted while still substantially reducing the sulfur dioxide gas concentration. An ordinarily skilled artist would have been motivated to perform such a modification to simply the generators construction, operation and maintenance as well as reducing the size and weight of the portable generator. It is well known to use trapping means on liquid discharge means and it would have been obvious to one having ordinary skill in the art at the time of invention to modify the instant invention to include a trapping means on the fluid discharge outlet in order to decrease the amount of sulfur dioxide escaping from the fluid discharge.

Furthermore, there is no apparent reason why applicant would be prevented from presenting claims corresponding to those of the instant application in the other copending application. See *In re Schneller*, 397 F.2d 350, 158 USPQ 210 (CCPA 1968). See also MPEP § 804.

Claim Rejections - 35 USC § 102

7. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless --
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

8. Claims 1 and 2 are rejected under 35 U.S.C. 102(b) as being anticipated by Allen (U.S. Patent Number 1,865,607). With respect to claim 1, Allen discloses a sulfuric acid generator having a sulfur dioxide conduit (10); water supply and conduit (24, 23); a third conduit comprising of a blending portion with codirectional flow inlet means for the water and sulfur dioxide (22,16), containment portion (17), and an agitation portion (18); and discharging means defining an open system (18 and bottom of 19). Therefore, claim 1 is anticipated.

With respect to claim 2, Allen discloses a mixing tank (19); means for facilitating and maintaining a submersion pool (by adjusting stopcock 20, it is possible to ensure that a constant volume of sulfurous acid is maintained in the bottom of tank 19 below the inlet from conduit 3); mixing tank outlet (20); and an open system. The open system results from the mixing tank inlet being higher than the tank outlet and from the mixing tank being open to atmospheric pressure. Therefore, claim 2 is anticipated. Instant claims 1 and 2 structurally read on the apparatus of Allen.

Claim Rejections - 35 USC § 103

9. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

10. Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over Allen (U.S. Patent Number 1,865,607) in view of McFarland (U.S. Patent Number 4,747,970). All the structural limitations recited above apply. In addition, Allen discloses an absorption tower (19' and 19"). The absorption tower contains a tortuous path (19") and an exhaust vent (31). Allen does not disclose the countercurrent flow of water through the absorption tower. It is well known to use absorption towers with countercurrent flow of a liquid solution to clean contaminants from gas streams including sulfur oxide gases. McFarland teaches such an absorption tower (Fig 4-6). It would have been obvious to one having ordinary skill in the art at the time of invention to modify Allen to include a countercurrent flow of water in the absorption tower as taught by McFarland. The motivation for doing so would have been in order to increase the sulfur dioxide removal from the gas exhaust stream. Therefore, it would have been obvious to combine McFarland with Allen to obtain the invention as specified in claim 3.

Allowable Subject Matter

11. Claim 4 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening

claims, rewritten to overcome rejections under 35 USC section 112 second paragraph and appropriate measures taken to overcome nonstatutory double patenting rejections.

Response to Arguments

12. Applicant's arguments filed August 2, 1999 have been fully considered but they are not persuasive.

In response to applicant's argument that the reference Allen does not teach the hydration reaction of the instant application and that the instant application can operate at ambient temperatures while the apparatus of Allen can have above ambient operating pressures are arguments regarding process limitations. It appears that applicant is arguing how the instant invention operates differently from that of the prior art, however, the device does not know in what manner it will be used and hence the intended use of the device is not germane to the issue of patentability of the device. A recitation of the intended use of the claimed invention must result in a structural difference between the claimed invention and the prior art in order to patentably distinguish the claimed invention from the prior art. If the prior art structure is capable of performing the intended use, then it meets the claim. In a claim drawn to a process of making, the intended use must result in a manipulative difference as compared to the prior art. See *In re Casey*, 152 USPQ 235 (CCPA 1967) and *In re Otto*, 136 USPQ 458, 459 (CCPA 1963).

In addition, the examiner notes that the amendment and response did not address the double patent rejection.

13. The declaration filed on August 2, 1999 under 37 CFR 1.131 has been considered but is ineffective to overcome the Allen reference. See the comments in the above paragraph.

Conclusion

14. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

15. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Susan K. Ohorodnik, whose telephone number is (703) 306-5463. The examiner can normally be reached Monday thru Friday from 9:00 am to 5:00 pm.

Any inquiry of a general nature relating to the status of this application should be directed to the Group receptionist whose telephone number is (703) 308-1495.

sko

September 5, 1999

Marian C Knode

MARIAN C. KNODE
SUPERVISORY PATENT EXAMINER
GROUP ~~1800~~ 1700